

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL

OFFICE OF AIR QUALITY

**Colgate-Palmolive Company
1410 South Clark Blvd.
Clarksville, Indiana, 47129**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F019-14122-00003	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 29, 2002 Expiration Date: July 29, 2007

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permits Superseded

SECTION B GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]
- B.19 Operational Flexibility [326 IAC 2-8-15]
- B.20 Permit Revision Requirement [326 IAC 2-8-11.1]
- B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]
- B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

SECTION C SOURCE OPERATION CONDITIONS

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Overall Source Limit [326 IAC 2-8]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-8-4(3)]

- C.9 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

TABLE OF CONTENTS (Continued)

C.10	Compliance Requirements [326 IAC 2-1.1-11]
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TABLE OF CONTENTS (Continued)

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
- C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]
- C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]
- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 Particulate Matter (PM) [326 IAC 6-2-4]
- D.1.2 Nitrogen Dioxide (NO_x) [326 IAC 2-2] [326 IAC 2-8-4]
- D.1.3 Sulfur Dioxide (SO₂) [326 IAC 2-2] [326 IAC 7-1.1-1] [326 IAC 12-1] [326 IAC 2-8-4]
- D.1.4 Particulate Matter with an Aerodynamic Diameter of Less than 10 Micron [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]
- D.1.5 Opacity Limit [326 IAC 12-1] [40 CFR 60.43(c)]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.7 Sulfur Dioxide Emissions and Sulfur Content

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.1.8 Visible Emissions Notations

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.1.9 Record Keeping Requirements
- D.1.10 Reporting Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.2.1 PM and PM10 Emission Limitation [326 IAC 2-2] [326 IAC 2-8-4] [40 CFR 52.21] [326 IAC 6-1-2]
- D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]
- D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.2.4 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.2.5 Visible Emissions Notations

TABLE OF CONTENTS (Continued)

- D.2.6 Parametric Monitoring
- D.2.7 Baghouse Inspections
- D.2.8 Broken or Failed Bag Detection

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.2.9 Record Keeping Requirements

SECTION D.3 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.3.1 Sulfur Dioxide (SO₂) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]
- D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.3.3 Sulfur Dioxide

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.3.4 Parametric Monitoring
- D.3.5 Scrubber Inspections
- D.3.6 Failure Detection

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.3.7 Record Keeping Requirements
- D.3.8 Reporting Requirements

SECTION D.4 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-9]
- D.4.4 Reporting Requirements

Certification Form
Emergency Occurrence Form
Natural Gas Fired Boiler Certification
Quarterly Report Form
Quarterly Deviation and Compliance Monitoring Report Form

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary cleanser and dental products manufacturing process.

Authorized individual:	Plant Manager
Source Address:	1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address:	P.O. Box CS9, Jeffersonville, IN 47131-7009
SIC Code:	2844, 2841
Source Location Status:	Clark
County Status:	Nonattainment for ozone Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

NOTE: All throughputs are included in a IDEM, OAQ confidential file as the source considers them confidential.

- (a) Four boilers constructed in 1993 and 1994, fired by natural gas or #2 fuel oil as alternative fuel, identified as 13-01 to 13-04, with heat input capacity of 60.506 MMBtu per hour each, and venting to stacks S1 and S2.
- (b) One (1) glycerin cooling tower, identified as 18-01.
- (c) One (1) cleanser manufacturing process, constructed prior to 1973, using integral baghouses 38-01 through 38-03, and 38-05 through 38-12, and venting to stacks V3 -V6 and V10-V16.
- (d) One (1) dental creme manufacturing process, constructed prior to 1973, using baghouse 40-03 for control, and integral baghouses 40-30 through 40-44, and 40-47 through 40-49, and venting to stacks V7 and V17-V34.
- (e) One (1) lime storage facility at the waste treatment plant, constructed in 1973, using integral baghouse 48-01, and venting internally.
- (f) One (1) base plant sulfonation process, constructed prior to 1973, using two electrostatic precipitators and a scrubber for control and venting to stack S8.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Gasoline fuel transfer and dispensing operation handling less than 1,300 gallons per day.
- (b) Storage tanks with a capacity less than or equal to 1,000 gallons and annual throughputs equal to or less than 12,000 gallons.
- (c) Vessel storage of oils.
- (d) Manufacturing activities not resulting in the emission of HAPs.
- (e) Closed loop heating system.
- (f) Activities associated with the treatment waste water streams with an oil and grease content less than or equal to 1 percent by volume.
- (g) Operations using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.
- (h) Noncontact cooling tower system with forced and induced draft cooling tower.
- (i) Replacement and repair of air filtration equipment.
- (j) Heat exchanger cleaning and repair.
- (k) Process vessel cleaning.
- (l) Paved and unpaved roads and parking lots.
- (m) Asbestos abatement projects regulated by 326 IAC 14-10.
- (n) Purging of gas lines and vessels relating to routine maintenance.
- (o) Equipment used to collect material that might be released during a malfunction, process upset or spill cleanup.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) On-site emergency response equipment.
- (r) Diesel generators not exceeding 1,600 horsepower.
- (s) Stationary fire pumps.
- (t) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 400 actual cubic feet per minute.
- (u) Purge double block and bleed valves.
- (v) Filter or coalescer media change out.

- (w) A laboratory.
- (x) Degreasing operations that do not exceed 145 gallons per 12 consecutive months.
- (y) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year.
 - (1) Dump stations.
 - (2) Unloading\storage tank vent.
 - (3) Glycerin recovery process.
 - (4) Filling lines for PCP.
 - (5) Ink jet code printing operations.
 - (6) Use of packaging and label adhesives.
 - (7) Storage tanks and mixing vessels greater than 1,000 gallons, that are exempted by emission rate threshold.
 - (8) Fugitive emissions from pumps, valves, flanges, and connections.
 - (9) Fugitive emissions from solid material handling activities.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish

to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
- (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Branch)
or,
Telephone No.: 317-233-5674 (ask for Compliance Branch)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-8-5(2)(1), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4]
[326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit, and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.

- (4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private

shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Four boilers constructed in 1993 and 1994, fired by natural gas or #2 fuel oil as alternative fuel, identified as 13-01 to 13-04, with heat input capacity of 60.506 MMBtu per hour each, and venting to stacks S1 and S2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-2-4]

The four (4) boilers, identified as 13-01 through 13-04, are subject to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) because they were constructed after September 21, 1983, the applicability date for this rule. Pursuant to CP019-2939-00003 and 326 IAC 6-2-4, the particulate emissions from each of the four boilers shall be limited to less than 0.26 pounds per million British thermal units heat input.

D.1.2 Nitrogen Dioxide (NO_x) [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The input of natural gas to the 4 boilers shall be limited to 1980 million cubic feet per twelve consecutive month period. For the purposes of determining compliance, every 1000 gallons of No. 2 fuel oil burned shall be equivalent to 0.20 million cubic feet of natural gas based on nitrogen oxides emissions. This usage limit is required to limit the potential to emit of nitrogen oxides to less than 99 tons per year. This condition, in combination with emission credits claimed from construction permit 019-2939-00003 through the removal of two 96 MMBtu/hr and one 120 MMBtu/hr natural gas- and fuel oil-fired boilers, will limit the increase of nitrogen dioxide emissions from the boilers to less than 40 tons per year, therefore the boilers are not subject to the requirements of 326 IAC 2-2 and 40 CFR 52.21.
- (b) Pursuant to 326 IAC 2-8-4, the fuel usage limit in (a) above is equivalent to NO_x emissions of less than 99 tons per year, therefore 326 IAC 2-7 does not apply.

D.1.3 Sulfur Dioxide (SO₂) [326 IAC 2-2] [326 IAC 7-1.1-1] [326 IAC 12-1] [326 IAC 2-8-4]

The input of No. 2 fuel oil to the 4 boilers shall be limited to 1,540,000 gallons per twelve consecutive month period. This is equivalent to 39.4 tons of sulfur dioxide per year from burning fuel oil. The #2 fuel oil shall not exceed 0.36 percent sulfur content. These limits will limit the increase of sulfur dioxide emissions to less than 40 tons per 12 consecutive months, therefore the boilers are not subject to the requirements of 326 IAC 2-2 or 326 IAC 2-7. This condition will satisfy the requirements of 326 IAC 7-1.1 and 326 IAC 12 (40 CFR 60.40c Subpart Dc).

D.1.4 Particulate Matter with an Aerodynamic Diameter of Less than 10 Micron [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-8-4, the fuel usage limit in Condition D.1.2 will limit emissions of PM10 from the boilers to less than 7.6 tons per year. Compliance with this limit and the PM10 limits in Section D.2 will render 326 IAC 2-7, 326 IAC 2-2, and 40 CFR 52.21 not applicable.

D.1.5 Opacity Limit [326 IAC 12-1] [40 CFR 60.43(c)]

The visible emissions shall not exceed the 20 percent opacity limit established by 326 IAC 12 (40 CFR 60.40c Subpart Dc).

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control device.

Compliance Determination Requirements

D.1.7 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.8 Visible Emissions Notations

- (a) Visible emission notations of each boiler stack exhaust shall be performed when burning fuel oil once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, that the Permittee shall maintain records at the source of the natural gas used. The records shall be complete and sufficient to establish compliance with the NO_x emission limits established in this permit. The records shall contain a minimum of the following:
 - (1) The amount of natural gas used per day;
 - (2) The heat content of the natural gas;

- (3) The heat input from combustion of natural gas per month.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- (c) To document compliance with Condition D.1.8 the Permittee shall maintain records of visible emission notations of each boiler stack exhaust once per shift.
 - (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2 and D.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (b) One (1) glycerin cooling tower, identified as 18-01.
- (c) One (1) cleanser manufacturing process, constructed prior to 1973, using integral baghouses 38-01 through 38-03, and 38-05 through 38-12, and venting to stacks V3-V6 and V10-V16.
- (d) One (1) dental creme manufacturing process, constructed prior to 1973, using baghouse 40-03 for control, and integral baghouses 40-30 through 40-44, and 40-47 through 40-49, and venting to stacks V7 and V17-V34.
- (e) One (1) lime storage facility at the waste treatment plant, constructed in 1973, using integral baghouse 48-01, and venting internally.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 PM and PM10 Emission Limitation [326 IAC 2-2] [326 IAC 2-8-4] [40 CFR 52.21] [326 IAC 6-1-2]

The cleanser manufacturing process, dental creme manufacturing process, and the lime storage facility shall comply with the following limits:

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
Cleanser Manufacturing			
38-01	#2 Powder Filling Line Baghouse	0.03	8752
38-02	South Making & Finishing Lines Baghouse	0.03	8752
38-03	#3 Line Powder Filling Baghouse	0.03	5179
38-05	Calcite Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-06	Soda Ash Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-07A/B	Calcite Silo Rail Unloading Receiver Baghouse: Stack "A" and "B"	0.03	6730
38-08	Soda Ash Silo Unloading Receiver Baghouse	0.03	1835
38-09	Magnesium Oxide Silo Unloading Receiver Baghouse	0.03	1200
38-10	East Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-11	West Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-12	Central Vacuum System Baghouse	0.03	645

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
Dental Creme Manufacturing			
40-03	N&S DOPP House Vent Baghouse	0.03	5966
40-30	N&S DOPP Dicalcium Phosphate Baghouse	0.03	1600
40-31	N&S DOPP Silica Baghouse	0.03	620
40-32	Fryma 2 Silica Baghouse	0.03	620
40-33	Fryma 2 Dical Baghouse	0.03	1600
40-34	Fryma 1 Silica Baghouse	0.03	620
40-35	Fryma 1 Dical Baghouse	0.03	1720
40-36	Dical Silo S-1 Railcar Unloading Baghouse	0.03	3437
40-37	Dical Silo S-1 Truck Unloading Vent Baghouse	0.03	6
40-38	Fryma Silo S-2 Railcar Unloading Baghouse	0.03	3437
40-39	Fryma Silo S-2 Truck Unloading Vent Baghouse	0.03	4
40-40	Silica Silo S-3 Truck Unloading Vent Baghouse	0.03	4
40-41	Silica Silo S-3 Railcar Unloading Baghouse	0.03	666
40-42	B Dopp Silica Cyclone Bin Baghouse	0.03	456
40-43	B Dopp Silica Bag Dump Station Baghouse	0.03	643
40-44	Fryma Multi-Bag Dump Station Vent Baghouse	0.03	643
40-47	B Dopp Silica Cyclone Baghouse	0.03	602
40-48	Fryma 1 Silica Cyclone Baghouse	0.03	666
40-49	Fryma 2 Silica Cyclone Baghouse	0.03	666
Lime Storage			
48-01	Lime Silo Vent Baghouse	0.03	1296

These limits are equivalent to 68.6 tons per year of PM and PM10 emissions each. These limits, in combination with the PM10 limits in Section D.1, limit the source total PM10 to less 86.2 tons per year. This renders the requirements of 326 IAC 2-7, 326 IAC 2-2, and 40 CFR 52.21 not applicable. This limit also limits the source total PM emissions to less than 86.2 tons per year. This renders the requirements of 326 IAC 2-2, 40 CFR 52.21, and 326 IAC 6-1-2 not applicable.

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (e) (Manufacturing Processes), the particulate matter (PM) from the cleanser manufacturing process, dental creme manufacturing process, and lime storage facility shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

P = process weight rate in tons per hour

The individual limits are included in a IDEM, OAQ confidential file because the and process weight rates are considered confidential by the source.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control device.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM)

In order to comply with D.2.1 and D.2.2, the baghouses for particulate control shall be in operation and control emissions from the cleanser manufacturing process, dental creme manufacturing process, and lime storage facility.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of 40-03 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouse 40-03 used in conjunction with the dental creme manufacturing process, at least once per shift when the dental creme manufacturing process is in operation. When for any one reading, the pressure drop across baghouse 40-03 is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of baghouse 40-03 controlling the dental creme manufacturing process when venting to the atmosphere.

D.2.8 Broken or Failed Bag Detection

In the event that bag failure has been observed in baghouse 40-03:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of once per shift visible emission notations of 40-03 stack exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain once per shift records of the total pressure drop during normal operation.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (f) One (1) base plant sulfonation process, constructed prior to 1973, using two electrostatic precipitators and a scrubber for control and venting to stack S8.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Sulfur Dioxide (SO₂) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-8-4, the sulfur input to the sulfonation process shall be limited to 2,190 tons per twelve (12) consecutive month period. The SO₂ emissions shall be limited to 1.57 pounds per hour. This limit is based on an emission factor of 3.14×10^{-3} pounds of SO₂ per pound sulfur input to the process. This limit is equivalent to 6.9 tons per year. Therefore, the requirements of 326 IAC 2-7 and 326 IAC 2-2 do not apply.

D.3.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.3 Sulfur Dioxide

In order to comply with D.3.1, the scrubber and at least one electrostatic precipitator must be in operation at all times the sulfonation process is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.4 Parametric Monitoring

The Permittee shall monitor and record the pH and gas stream pressure drop of the scrubber, at least once per shift when the sulfonation process is in operation. When for any one reading, the pressure drop across the scrubber is outside the range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the pH of the scrubber is above the normal maximum pH level of 13, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A gas stream pressure reading that is outside the above mention range or a pH above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the gas stream pressure and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.5 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the sulfonation process when venting to the atmosphere

D.3.6 Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.7 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain the records of the total amount of sulfur input to the sulfonation process.
- (b) To document compliance with Condition D.3.4, the Permittee shall maintain records of the pH readings and gas stream pressure drop of the caustic scrubber once per shift.
- (c) To document compliance with Condition D.3.5, the Permittee shall maintain records of the results of the inspections performed on the scrubber and the number of scrubber parts replaced.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (a) Gasoline fuel transfer and dispensing operation handling less than 1,300 gallons per day.
- (b) Storage tanks with a capacity less than or equal to 1,000 gallons and annual throughputs equal to or less than 12,000 gallons.
- (c) Vessel storage of oils.
- (d) Manufacturing activities not resulting in the emission of HAPs.
- (e) Closed loop heating system.
- (f) Activities associated with the treatment waste water streams with an oil and grease content less than or equal to 1 percent by volume.
- (g) Operations using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.
- (h) Noncontact cooling tower system with forced and induced draft cooling tower.
- (i) Replacement and repair of air filtration equipment.
- (j) Heat exchanger cleaning and repair.
- (k) Process vessel cleaning.
- (l) Paved and unpaved roads and parking lots.
- (m) Asbestos abatement projects regulated by 326 IAC 14-10.
- (n) Purging of gas lines and vessels relating to routine maintenance.
- (o) Equipment used to collect material that might be released during a malfunction, process upset or spill cleanup.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) On-site emergency response equipment.
- (r) Diesel generators not exceeding 1,600 horsepower.
- (s) Stationary fire pumps.
- (t) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 400 actual cubic feet per minute.
- (u) Purge double block and bleed valves.
- (v) Filter or coalescer media change out.
- (w) A laboratory.

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities (Continued)

- (x) Degreasing operations that do not exceed 145 gallons per 12 consecutive months.
- (y) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year.
 - (1) Dump stations.
 - (2) Unloading\storage tank vent.
 - (3) Glycerin recovery process.
 - (4) Filling lines for PCP.
 - (5) Ink jet code printing operations.
 - (6) Use of packaging and label adhesives.
 - (7) Storage tanks and mixing vessels greater than 1,000 gallons, that are exempted by emission rate threshold.
 - (8) Fugitive emissions from pumps, valves, flanges, and connections.
 - (9) Fugitive emissions from solid material handling activities.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(e) (Manufacturing Processes), the allowable PM emission rate from all PM emitting activities shall not exceed the allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), the permittee shall keep the following records over the life of each VOC storage vessel:

- (a) The vessel identification number;
- (b) The vessel dimensions
- (c) The vessel capacity
- (e) A description of the emission control equipment for each vessel.

D.4.4 Reporting Requirements

The permittee shall submit a one-time report containing the information in Condition D.4.3, to the address listed in Section C- General Reporting Requirements of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
 CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel
From To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Date: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003
Facility: Four 60.506 MMBtu/hr boilers
Parameter: NOx
Limit: Natural gas equivalence: 1980 million cubic feet per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003
Facility: Sulfonation process
Parameter: Sulfur Dioxide
Limit: Input of sulfur to process of less than 2190 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003
Facility: Four 60,506 MMBtu/hr boilers
Parameter: SO₂
Limit: 1,540,000 gallons of No. 2 fuel oil per 12 consecutive months

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Colgate-Palmolive Company
Source Address: 1410 South Clark Blvd., Clarksville, IN 47129
Mailing Address: P.O. Box CS9, Jeffersonville, IN 47131-7009
FESOP No.: 019-14122-00003

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

July 29, 2002

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the Technical Support Document
for Federally Enforceable State Operating Permit (FESOP) Renewal**

Source Background and Description

Source Name:	Colgate-Palmolive Company
Source Location:	1410 South Clark Blvd., Clarksville, Indiana 47129
County:	Clark
SIC Code:	2844, 2841
Operation Permit No.:	F019-14122-00003
Permit Reviewer:	ERG/KC

On May 16, 2002 the Office of Air Quality (OAQ) had a notice published in the Clark County Evening News, Jeffersonville, Indiana, stating that Colgate-Palmolive Company had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a cleanser and dental products manufacturing source with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 17, 2002, Colgate-Palmolive Company submitted comments on the proposed FESOP Renewal. The summary of the comments is as follows. Bold text has been added to the permit and text with a line through it has been deleted. The table of contents was updated as needed.

Comment 1:

The applicant noted that the permit states that the facility is "1 of 28 Source Categories." However, the TSD states that the source is not 1 of the 28 and the source agrees with the TSD statement. The applicant requests that the error in the permit be corrected.

Response to Comment 1:

Among the list of 28 source categories are chemical operations. EPA has defined chemical operations as any one whose SIC code begins with 28. Therefore, this source is considered 1 of 28 source categories and no change was made to the permit. The memorandum, dated August 21, 1981, titled classification of the Bandstown Fuel Alcohol Company under PSD, describes EPA's decision to consider sources with a SIC code starting with 28 as chemical process plants. Please note that the TSD incorrectly states that this source is not 1 of 28 source categories. No change was made to the TSD because IDEM prefers the TSD to reflect the permit that was on public notice. This document displays all changes to the permit that occurred after public notice.

Comment 2:

The applicant noted that insignificant activities were numbered incorrectly. There are two q's. The applicant requested that the insignificant activities be renumbered.

Response to Comment 2:

- (q) On-site emergency response equipment.
- (qr) Diesel generators not exceeding 1,600 horsepower.
- (rs) Stationary fire pumps.
- (st) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 400 actual cubic feet per minute.
- (tu) Purge double block and bleed valves.
- (tv) Filter or coalescer media change out.
- (vw) A laboratory.
- (wx) Degreasing operations that do not exceed 145 gallons per 12 consecutive months.
- (xy) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year.

Comment 3:

The applicant noted that Condition C.1(a)(1) states that "the potential to emit of any regulated pollutant, except particulate matter (PM), shall be limited to less than 100 tons per 12 consecutive month." The applicant also noted that PM is limited to less than 100 tons per year and therefore this statement is in error.

Response to Comment 3:

This permit limits both PM and PM10 emissions to less than 100 tons per year. PM emissions are limited to less than 100 tons per year because PM and PM10 emissions from this source are considered to be equivalent and this permit contains a limit on PM10 emissions. Pursuant to 326 IAC 2-8, emissions of PM10, SO₂, NO_x, VOC, and CO each have to be limited to less than 100 tons per year in order for a source to be issued a FESOP. PM emissions are not regulated by the FESOP rule, but PM10 emissions are. Therefore this condition does not need to say that PM emissions are limited to less than 100 tons per year. However, this condition should state that PM emissions shall be limited to less than 250 tons per year, pursuant to 326 IAC 2-2. A condition stating this was added. PM emissions from this source are limited to less than 250 tons per year and therefore the Permittee is in compliance with this condition.

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(bc) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(ed) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

Comment 4:

The applicant noted that the compliance monitoring and record keeping requirements mentioned in Condition C.11 (Compliance Monitoring) are not applicable at this time to the source. Should a requirement for compliance monitoring equipment be necessary, the permit should allow 90 days after operation begins to comply with this requirement.

Response to Comment 4:

No change was made as a result of this comment. The Permittee is subject to Condition C.11 because there are compliance monitoring and record keeping requirements in Sections D.1, D.2, and D.3. The monitoring requirements include visible emissions notations, parametric monitoring, and baghouse and scrubber inspections. Since the stacks, baghouses, and scrubbers are currently in operation, this condition requires that the monitoring requirements be implemented upon issuance of this permit. Condition C.11 also states that the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. The 90 day allowance referred to in this comment only applied to the first time FESOP to allow the Permittee to comply with a new requirement.

Comment 5:

The applicant stated that Condition C.12 (Maintenance of Emission Monitoring Equipment) is not applicable to this source because the source does not have, and is not required to have, any emission monitoring equipment. The applicant would like this condition to be removed from the permit.

Response to Comment 5:

The following change was made as a result of this comment.

~~C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]~~

-
- ~~(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.~~
- ~~(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.~~

Comment 6:

The applicant noted that Condition C.15 (Emergency Reduction Plan) is not applicable to the source because the permit limits emissions of all regulated pollutants to less than 100 tpy. The applicant requests that this condition be removed.

Response to Comment 6:

IDEM agrees that since PM and PM10 emissions are considered equivalent, the permit limits both PM and PM10 emissions to less than 100 tons per year. The permit also limits SO2 and NOx emissions to less than 100 tons per year. Therefore the source is not subject to Condition C.15 and this condition was removed. Conditions in Section C were renumbered accordingly.

~~C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]~~

~~Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):~~

- ~~(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.~~
- ~~(b) These ERPs shall be submitted for approval to:~~

~~Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015~~

~~within ninety (90) days from the date of issuance of this permit.~~

Comment 7:

The applicant noted that the reference for Condition C.16 (Risk Management Plan) (now Condition C.15) is incorrect. The condition should reference 326 IAC 2-8-5(a)(1), not 326 IAC 2-7-6(5).

Response to Comment 7:

The following change was made as a result of this comment:

C.4615 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC ~~2-7-6(5)~~ **2-8-5(a)(1)**, a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Comment 8:

The applicant noted that the grain loading for Baghouse 40-03 listed in Condition D.2.1 should be 0.03 gr/dscf not 0.06 gr/dscf as the permit states. The applicant also noted that the gas flow rates for three baghouses are incorrect. The flowrate for baghouse 40-37 should be 6 acfm and the flowrates for baghouses 40-39 and 40-40 should both be 4 acfm. The applicant would like these corrections to be made in Condition D.2.1 and in the TSD.

Response to Comment 8:

The grain loading for baghouse 40-03 was changed from 0.06 to 0.03 gr/dscf in Condition D.2.1. The flow rates for baghouses 40-37, 40-39, and 40-40 were also changed in Condition D.2.1. These changes do not affect the potential emissions for the source. Therefore no changes were needed in any limits. To clarify that Condition D.2.1 is intended to limit both PM and PM10 emissions to less than 100 tons per year, the condition was changed as shown below. No change was made to the TSD. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

D.2.1 ~~Particulate Matter with an Aerodynamic Diameter of Less than 10-Micron~~ PM and PM10 Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4] [40 CFR 52.21][326 IAC 6-1-2]

The cleanser manufacturing process, dental creme manufacturing process, and the lime storage facility shall comply with the following limits:

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
Cleanser Manufacturing			
38-01	#2 Powder Filling Line Baghouse	0.03	8752
38-02	South Making & Finishing Lines Baghouse	0.03	8752
38-03	#3 Line Powder Filling Baghouse	0.03	5179
38-05	Calcite Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-06	Soda Ash Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-07A/B	Calcite Silo Rail Unloading Receiver Baghouse: Stack "A" and "B"	0.03	6730
38-08	Soda Ash Silo Unloading Receiver Baghouse	0.03	1835
38-09	Magnesium Oxide Silo Unloading Receiver Baghouse	0.03	1200
38-10	East Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-11	West Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-12	Central Vacuum System Baghouse	0.03	645
Dental Creme Manufacturing			
40-03	N&S DOPP House Vent Baghouse	0.06 0.03	5966
40-30	N&S DOPP Dicalcium Phosphate Baghouse	0.03	1600
40-31	N&S DOPP Silica Baghouse	0.03	620
40-32	Fryma 2 Silica Baghouse	0.03	620
40-33	Fryma 2 Dical Baghouse	0.03	1600
40-34	Fryma 1 Silica Baghouse	0.03	620
40-35	Fryma 1 Dical Baghouse	0.03	1720
40-36	Dical Silo S-1 Railcar Unloading Baghouse	0.03	3437
40-37	Dical Silo S-1 Truck Unloading Vent Baghouse	0.03	4 6
40-38	Fryma Silo S-2 Railcar Unloading Baghouse	0.03	3437
40-39	Fryma Silo S-2 Truck Unloading Vent Baghouse	0.03	4 4
40-40	Silica Silo S-3 Truck Unloading Vent Baghouse	0.03	4 4
40-41	Silica Silo S-3 Railcar Unloading Baghouse	0.03	666

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
40-42	B Dopp Silica Cyclone Bin Baghouse	0.03	456
40-43	B Dopp Silica Bag Dump Station Baghouse	0.03	643
40-44	Fryma Multi-Bag Dump Station Vent Baghouse	0.03	643
40-47	B Dopp Silica Cyclone Baghouse	0.03	602
40-48	Fryma 1 Silica Cyclone Baghouse	0.03	666
40-49	Fryma 2 Silica Cyclone Baghouse	0.03	666
Lime Storage			
48-01	Lime Silo Vent Baghouse	0.03	1296

These limits are equivalent to 68.6 tons per year of **PM and PM10 emissions each**. These limits, in combination with the PM10 limits in Section D.1, limit the source total PM10 to less 86.2 tons per year. This renders the requirements of 326 IAC 2-7, 326 IAC 2-2, and 40 CFR 52.21 not applicable.

~~Since PM and PM10 emissions are equivalent, this~~ **This** limit also limits the source total PM emissions to less than 86.2 tons per year. This renders the requirements of 326 IAC 2-2, ~~and~~ 40 CFR 52.21, **and 326 IAC 6-1-2** not applicable.

Comment 9:

The applicant noted that Condition D.2.2 (Particulate Matter) containing limitations pursuant to 326 IAC 6-3-2 is not limiting because the permit restricts emissions from all baghouses to less than 0.03 gr/dscf pursuant to 326 IAC 2-8-4. For this reason, the applicant requests that Condition D.2.2 be deleted.

Response to Comment 9:

No change was made to the permit as a result of this comment. Despite the fact that 326 IAC 6-3-2 is not the most stringent limit, the rule still applies. For this reason, it must be included in the permit. Compliance with Condition D.2.1 will ensure compliance with Condition D.2.2.

Comment 10:

The applicant noted that the Compliance Response Plan is only necessary for baghouse 40-03. The applicant would like Condition D.2.8 (Broken or Failed Bag Detection) to state "in the event that a bag failure is observed in baghouse 40-03" to clarify that this condition only applies to baghouse 40-03.

Response to Comment 10:

Baghouse 40-03 is the only baghouse that is required to be inspected. Therefore Condition D.2.8 only applies to baghouse 40-03. The following changes were made to clarify this:

D.2.8 Broken or Failed Bag Detection

In the event that bag failure has been observed in baghouse 40-03:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Comment 11:

The applicant noted that in the TSD under Compliance Requirements, it states:

"All compliance requirements from previous approvals were incorporated into this FESOP except the following: In the past permit, compliance monitoring was required for the sulfonation process, monitoring the sulfur usage.

"Reason not incorporated: Based on stack test results, the sulfonation process was determined to be an insignificant activity, and no compliance monitoring is necessary."

As a result, the applicant requests that Conditions D.3.4, D.3.5, D.3.6, D.3.7, and D.3.8 be removed from the permit.

If the conditions are not removed, the Permittee suggests the following changes:

1. Since the acid content is measured with a pH meter, "acid content" should be replaced with "pH" everywhere that it appears.
2. Since the pressure drop to be measured will be that of the gas stream, "gas stream" should be inserted before "pressure drop" throughout the text.
3. The source feels that monitoring of the liquid flow stream would be difficult because the air in the flow stream would be measured as liquid. Additionally, calibration of the flow meter is a safety hazard because of the caustic nature of the material. Lastly, the scrubber is operated in a closed loop system and therefore the source would like the requirement to monitor the flowrate to be removed from the permit.

The applicant also noted that Condition D.3.7(d) mentions record keeping for the electrostatic precipitator, but there are no monitoring requirements for the ESP. They would like this requirement to be removed.

Response to Comment 11:

The following language in the TSD is incorrect:

"All compliance requirements from previous approvals were incorporated into this FESOP except the following: In the past permit, compliance monitoring was required for the sulfonation process, monitoring the sulfur usage.

"Reason not incorporated: Based on stack test results, the sulfonation process was determined to be an insignificant activity, and no compliance monitoring is necessary."

The sulfonation process has the potential to emit large quantities of sulfur dioxide and is therefore not considered an insignificant activity. Monitoring of the scrubber is necessary because the source is taking a limit on sulfur dioxide emissions so that the requirements of both 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply. Therefore the scrubber monitoring requirements were not removed from the permit.

IDEM agrees to replace "acid content" with "pH" and to add "gas stream" before "pressure drop" in the monitoring requirements. Since the scrubber is operated in a closed loop system, the flowrate monitoring requirement was removed. Lastly, the reference to record keeping requirements for the ESP was also removed since there are no monitoring requirements for the ESP.

D.3.4 Parametric Monitoring

The Permittee shall monitor and record the ~~acid content, pH and gas stream~~ pressure drop, and ~~flow rate~~ of the scrubber, at least once per shift when the sulfonation process is in operation when venting to the atmosphere. When for any one reading, the ~~gas stream~~ pressure drop across the scrubber is outside the range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. ~~When for any one reading, the flow rate of the scrubber is less than the minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.~~ When for any one reading, the ~~acid content~~ **pH** of the scrubber is above the normal maximum pH level of 13, or ~~an acid content a pH~~ established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A **gas stream** pressure reading that is outside the above mention range, ~~a flow rate that is below the above mentioned minimum, or an acid content a pH~~ above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the ~~gas stream~~ pressure, ~~flow rate~~, and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.7 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain the records of the total amount of sulfur input to the sulfonation process.
- (b) To document compliance with Condition D.3.4, the Permittee shall maintain records of the pH readings **and gas stream** pressure drop ~~and flow rate~~ of the caustic scrubber once per shift.
- (c) To document compliance with Condition D.3.5, the Permittee shall maintain records of the results of the inspections performed on the scrubber and the number of scrubber parts replaced.
- ~~(d) To document compliance with Condition D.3.6, the Permittee shall maintain records of the results of the inspections performed on the electrostatic precipitators and the number of electrostatic precipitator parts replaced.~~
- (e d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 12:

The applicant noted that the insignificant activity listed as (x) in A.3 (now listed as (y)) does not have a letter next to it and the language has been changed. The source request that, for purposes of consistency, all insignificant activities be correctly numbered.

Response to Comment 12:

The following change was made as a result of this comment:

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities (Continued)

- (x) Degreasing operations that do not exceed 145 gallons per 12 consecutive months.
- (y) ~~Activities with emissions below the significance threshold:~~ **Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year.**
- (1) Dump stations.
 - (2) Unloading\storage tank vent.
 - (3) Glycerin recovery process.
 - (4) Filling lines for PCP.
 - (5) Ink jet code printing operations.
 - (6) Use of packaging and label adhesives.
 - (7) Storage tanks and mixing vessels greater than 1,000 gallons, that are exempted by emission rate threshold.
 - (8) Fugitive emissions from pumps, valves, flanges, and connections.
 - (9) Fugitive emissions from solid material handling activities.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 13:

The applicant requests that the language in Condition D.4.1(a) be changed from “the activities listed in (a) through (ff)” to “the activities listed in (a) through (y).”

Response to Comment 13:

For purposes of accuracy, the following change was made:

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2~~(e) (Process Operations)~~**(Manufacturing Processes)**, the allowable PM emission rate from ~~the activities listed in (a) through (ff)~~ **all PM emitting activities** shall not exceed the allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

- (b) Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

Comment 14:

The applicant noted that, under 326 IAC 6-1-2 in the TSD, there appears to be a typographical error. The condition should read "326 IAC 6-1-2(a) (Particulate Emission Limitations) applies to this source." 326 IAC 6-1-2(a) is the requirement limiting the source to less than 100 tpy.

Response to Comment 14:

No change was made as a result of this comment. The source is not subject to the requirements of 326 IAC 6-1-2(a) because no facilities currently at the source are listed in 326 IAC 6-1-17, the source is limiting PM emissions to less than one hundred (100) tons per year in Condition D.2.1, and the source's actual PM emissions are less than ten (10) tons per year. Due to a previous error in applicability, the source was already complying with the limitations from 326 IAC 6-1-2 and compliance with these limits resulted in potential emissions of less than 100 tons per year. Therefore, limits equivalent to those in 326 IAC 6-1-2 were placed in the permit pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8-4 (FESOP) to limit emissions of PM10 and PM to less than the applicable thresholds.

Comment 15:

The applicant noted that page 16 of the TSD states that once per shift visible emissions notations are required for all baghouses. The permit only requires visible emission notations for baghouse 40-03. The applicant would like the error in the TSD to be corrected.

Response to Comment 15:

No change was made as a result of this comment. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Please note, however, that visible emission notations are only required for baghouse 40-03 and the TSD as it currently reads is incorrect.

Upon further investigation, IDEM, OAQ made the following changes to the permit:

1. The following changes were made:

D.3.4 Parametric Monitoring

The Permittee shall monitor and record the pH and gas stream pressure drop of the scrubber, at least once per shift when the sulfonation process is in operation ~~when venting to the atmosphere~~. When for any one reading, the pressure drop across the scrubber is outside the range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.

When for any one reading, the pH of the scrubber is above the normal maximum pH level of 13, or a pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A gas stream pressure reading that is outside the above mention range or a pH above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instruments used for determining the gas stream pressure and pH level shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.5 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the sulfonation process when venting to the atmosphere. ~~A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.~~

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) ~~(Process Operations)~~ **(Manufacturing Processes)**, the particulate matter (PM) from the cleanser manufacturing process, dental creme manufacturing process, and lime storage facility shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The individual limits are included in a IDEM, OAQ confidential file because the and process weight rates are considered confidential by the source.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouse 40-03 used in conjunction with the dental creme manufacturing process, at least once per shift when the dental creme manufacturing process is in operation ~~when venting to the atmosphere~~. When for any one reading, the pressure drop across baghouse 40-03 is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of baghouse 40-03 controlling the dental creme manufacturing process when venting to the atmosphere. ~~A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.~~

D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of once per shift visible emission notations of 40-03 stack exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain once per shift records of the total pressure drop during normal operation ~~when venting to the atmosphere.~~

July 29, 2002

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Federally Enforceable
State Operating Permit (FESOP) Renewal**

Source Background and Description

Source Name: Colgate-Palmolive Company
Source Location: 1410 South Clark Blvd., Clarksville, IN 47129
County: Clark
SIC Code: 2844, 2841
Operation Permit No.: 019-14122-00003
Permit Reviewer: ERG/KC

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from the Colgate Palmolive Company relating to the operation of a cleanser and dental products manufacturing process. Colgate Palmolive Company was issued FESOP 019-5535-0003 on December 10, 1996.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

NOTE: All throughputs are included in a IDEM, OAQ confidential file as the source considers them confidential.

- (a) Four boilers constructed in 1993 and 1994, fired by natural gas or #2 fuel oil as alternative fuel, identified as 13-01 to 13-04, with heat input capacity of 60.506 MMBtu per hour each, and venting to stacks S1 and S2.
- (b) One (1) glycerin cooling tower, identified as 18-01.
- (c) One (1) cleanser manufacturing process, constructed prior to 1973, using integral baghouses 38-01 through 38-03, and 38-05 through 38-12, and venting to stacks V3-V6 and V10-V16.
- (d) One (1) dental creme manufacturing process, constructed prior to 1973, using baghouse 40-03 for control, and integral baghouses 40-30 through 40-44, and 40-47 through 40-49, and venting to stacks V7 and V17-V34.
- (e) One (1) lime storage facility at the waste treatment plant, constructed in 1973, using integral baghouse 48-01, and venting internally.
- (f) One (1) base plant sulfonation process, constructed prior to 1973, using two electrostatic precipitators and a scrubber for control and venting to stack S8.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving New Source Review Approval

There are no new emission units being constructed during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Gasoline fuel transfer and dispensing operation handling less than 1,300 gallons per day.
- (b) Storage tanks with a capacity less than or equal to 1,000 gallons and annual throughputs equal to or less than 12,000 gallons.
- (c) Vessel storage of oils.
- (d) Manufacturing activities not resulting in the emission of HAPs.
- (e) Closed loop heating system.
- (f) Activities associated with the treatment waste water streams with an oil and grease content less than or equal to 1 percent by volume.
- (g) Operations using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.
- (h) Noncontact cooling tower system with forced and induced draft cooling tower.
- (i) Replacement and repair of air filtration equipment.
- (j) Heat exchanger cleaning and repair.
- (k) Process vessel cleaning.
- (l) Paved and unpaved roads and parking lots.
- (m) Asbestos abatement projects regulated by 326 IAC 14-10.
- (n) Purging of gas lines and vessels relating to routine maintenance.
- (o) Equipment used to collect material that might be released during a malfunction, process upset or spill cleanup.
- (p) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (q) On-site emergency response equipment.
- (r) Diesel generators not exceeding 1,600 horsepower.
- (s) Stationary fire pumps.
- (t) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading less than or equal to 0.03 grains

per actual cubic foot and a gas flow rate less than or equal to 400 actual cubic feet per minute.

- (u) Purge double block and bleed valves.
- (v) Filter or coalescer media change out.
- (w) A laboratory.
- (x) Degreasing operations that do not exceed 145 gallons per 12 consecutive months.
- (y) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year.
 - (1) Dump stations.
 - (2) Unloading\storage tank vent.
 - (3) Glycerin recovery process.
 - (4) Filling lines for PCP.
 - (5) Ink jet code printing operations.
 - (6) Use of packaging and label adhesives.
 - (7) Storage tanks and mixing vessels greater than 1,000 gallons, that are exempted by emission rate threshold.
 - (8) Fugitive emissions from pumps, valves, flanges, and connections.
 - (9) Fugitive emissions from solid material handling activities.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that baghouses 38-01 through 38-03, 38-05 through 38-12, 40-30 through 40-44, 40-47 through 40-49, and 48-01 be considered as an integral part of the cleanser manufacturing process, dental creme manufacturing process, and lime storage facility:

These baghouses operate as part of the pneumatic conveying transfer process. The baghouses create the vacuum pulling in all material as it progresses down the line. The collected material falls directly into the silo or reactor. The process cannot operate without the baghouses.

IDEM, OAQ, has evaluated the justification and agreed that the listed baghouses will be considered an integral part of the processes as they were considered in F019-5535-00003, issued on December 10, 1996. Therefore the permitting level will be determined using the potential to emit after the integral baghouses. Operating conditions in the proposed permit will specify that the listed baghouse shall operate at all times when the processes are in operation.

Existing Approvals

- (a) FESOP 019-5535-00003, issued on December 10, 1996; and expiring on December 10, 2001; and
- (b) AA 019-8057-00003, issued April 30, 1997.

All conditions from previous approvals were incorporated into this FESOP except the following:

- (a) FESOP 019-5535-00003, issued on December 10, 1996; and expiring on December 10, 2001,

Condition D.2.2, sulfonation process stack testing.

Reason not incorporated: A stack test was required in F 019-5535-00003, and was performed on July 29, 1997 on the caustic scrubber exhaust for the sulfonation proceeds. The results from the stack test showed an SO₂ emission rate of 0.012 pounds per hour which is significantly below the SO₂ limit of 1.57 pounds per hour. It was determined that because the emissions are significantly less than the limit, additional stack testing is not required in this permit cycle. pH readings are still required to show that the caustic scrubber is functioning properly, and reporting of the sulfur throughput is also still required. These requirements will provide adequate evidence that the sulfonation process is in compliance.

- (b) FESOP 019-5535-00003, issued on December 10, 1996; and expiring on December 10, 2001.

Condition D.1.2 and D.1.3 fuel limits.

Reason no incorporated: The fuel limits were presented in units of heat input (MMBtu/yr). This was determined to not be practically enforceable and the limits were converted to fuel usage (oil in gallons and natural gas in standard cubic feet).

- (c) No condition in previous FESOP for 326 IAC 8-9

This permit (019-14122-00003) requires that the source submit a one time report of the information required to be recorded under 326 IAC 8-9 (vessel identification, dimension, capacity, and emission control equipment), because the original FESOP did not have this requirement nor did it identify this rule as applicable.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on March 9, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 11).

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	957.67*
PM-10	957.67*
SO ₂	387.1
VOC	5.8
CO	89.0
NO _x	151.4

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.
 *PM and PM10 are after integral baghouses 38-01 through 38-03, 38-05 through 38-12, 40-30 through 40-44, 40-47 through 40-49, and 48-01.

HAPs	Potential to Emit (tons/year)
Arsenic	0.00424
Beryllium	0.00318
Cadmium	0.00318
Chromium	0.00318
Lead	0.00954
Mercury	0.00318
Manganese	0.00636
Nickel	0.00318
Selenium	0.0159
Benzene	0.002226
Dichlorobenzene	0.001272
Formaldehyde	0.0795
Hexane	1.908
Toluene	0.003604
TOTAL	2.0465

The emissions for the boilers are based on a worst case scenario for each pollutant, PM, PM10, SO₂, NO_x, worst case emissions are based on all four boilers burning only distillate fuel oil, VOC and CO emissions are based on all four boilers burning only natural gas.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, SO₂, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and emission offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on December 10, 1996, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F019-5535-00003; issued on December 10, 1996.

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Boilers	Less than 7.6	Less than 7.6	Less than 40	5.4	83.2	Less than 99	Negligible
Glycerin Process	0	0	0	24.38	0	0	0
Sulfonation Process	10	10	Less than 6.88	0	0	0	0
Cleanser Manufacturing Process, Dental Creme Manufacturing Process, Lime Storage Facility	Less than 69	Less than 69	0	0	0	0	0
Total PTE After Issuance	Less than 87	Less than 87	Less than 47	29.78	83.2	Less than 99	Negligible

County Attainment Status

The source is located in Clark County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Moderate nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone.
- (b) Clark County has been classified as nonattainment for ozone. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (c) Clark County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) The four boilers are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c), Subpart (Dc)) because they were constructed after June 9, 1989 and each have capacities greater than 10 MMBtu/hr, but less than 100 MMBtu/hr. According to the requirements of this rule, this source shall combust oil with a sulfur content less than 0.5 weight percent, and shall emit less than 0.5 lb SO₂/MMBtu. Also, this source shall not discharge into the atmosphere gases that exhibit greater than 20 percent opacity (6-minute average). The Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) This source is not subject to 40 CFR 60, Subpart O because it does not incinerate municipal sewage sludge.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. The requirements of 40 CFR, Subpart T do not apply to the degreasers because they do not use any solvent containing

methylene chloride, perchloroethylene, trichloroethylene, 1,1,1 trichloroethane, carbon tetrachloride, or chloroform.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offsets)

The cleanser manufacturing process, dental creme manufacturing process, lime storage facility, and base sulfonation process were all constructed in or prior to 1973. At this time emissions were above 250 tons per year of a criteria pollutant so upon promulgation of the PSD rules in August 7, 1977, the source was considered a major source under PSD. In 1993, the source applied for a construction permit to remove two 96 MMBtu/hr and one 120 MMBtu/hr natural gas- and fuel oil-fired boilers and to construct four 60.506 MMBtu/hr natural gas- and fuel oil-fired boilers. The potential emissions from this modification were over the PSD major thresholds. For this reason, CP019-2939-00003, issued June 4, 1993, included limits to ensure that emission increases from the modification were below the PSD thresholds for each criteria pollutant. In 1996, when IDEM required sources to submit an application for a Title V or FESOP, the source applied for a FESOP. F019-5535-00002, issued December 10, 1996, limited emissions of all criteria pollutants to less than 100 tons per year. Therefore the source is no longer a major under PSD. The limits ensuring that the source is a minor PSD source are included below:

- (a) The input of natural gas to the 4 boilers shall be limited to 1980 million cubic feet per twelve consecutive month period. For the purposes of determining compliance, every 1000 gallons of No. 2 fuel oil burned shall be equivalent to 0.20 million cubic feet of natural gas based on nitrogen oxides emissions. This condition, in combination with emission credits claimed from construction permit 019-2939-00003 through the removal of two 96 MMBtu/hr and one 120 MMBtu/hr natural gas- and fuel oil-fired boilers, will limit the increase of nitrogen dioxide emissions from the boilers to less than 40 tons per year. Therefore the boilers are not subject to the requirements of 326 IAC 2-2 and 40 CFR 52.21.
- (b) The input of No. 2 fuel oil to the 4 boilers shall be limited to 1,540,000 gallons per twelve consecutive month period. This is equivalent to 39.4 tons of sulfur dioxide per year from burning fuel oil. The #2 fuel oil shall not exceed 0.36 percent sulfur content. These limits will limit the increase of sulfur dioxide emissions to less than 40 tons per 12 consecutive months, therefore the boilers are not subject to the requirements of 326 IAC 2-2. This condition will satisfy the requirements of 326 IAC 7-1.1 and 326 IAC 12 (40 CFR 60.40c Subpart Dc).

The sulfur input to the sulfonation process shall be limited to 2,190 tons per twelve (12) consecutive month period. The SO₂ emissions from the sulfonation process shall be limited to 1.57 pounds per hour. This limit is based on an emission factor of 3.14x10⁻³ pounds of SO₂ per pound sulfur input to the process. These limits are equivalent to less than 6.88 tons per year. The source uses a caustic scrubber to meet these limits. These limits in combination with the SO₂ limits for the boilers limit the emissions of SO₂ from the source as a whole to less than 47 tons per year. Therefore the source is minor under 326 IAC 2-2.

- (c) PM and PM₁₀ emissions from the cleanser manufacturing process, the dental creme manufacturing process, and the lime storage facility shall be limited to 0.03 grain per dry standard cubic foot and the flowrates shown below:

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
Cleanser Manufacturing			
38-01	#2 Powder Filling Line Baghouse	0.03	8752
38-02	South Making & Finishing Lines Baghouse	0.03	8752
38-03	#3 Line Powder Filling Baghouse	0.03	5179
Cleanser Manufacturing (continued)			
38-05	Calcite Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-06	Soda Ash Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-07A/B	Calcite Silo Rail Unloading Receiver Baghouse: Stack "A" and "B"	0.03	6730
38-08	Soda Ash Silo Unloading Receiver Baghouse	0.03	1835
38-09	Magnesium Oxide Silo Unloading Receiver Baghouse	0.03	1200
38-10	East Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-11	West Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-12	Central Vacuum System Baghouse	0.03	645
Dental Creme Manufacturing			
40-03	N&S DOPP House Vent Baghouse	0.06	5966
40-30	N&S DOPP Dicalcium Phosphate Baghouse	0.03	1600
40-31	N&S DOPP Silica Baghouse	0.03	620
40-32	Fryma 2 Silica Baghouse	0.03	620
40-33	Fryma 2 Dical Baghouse	0.03	1600
40-34	Fryma 1 Silica Baghouse	0.03	620
40-35	Fryma 1 Dical Baghouse	0.03	1720
40-36	Dical Silo S-1 Railcar Unloading Baghouse	0.03	3437
40-37	Dical Silo S-1 Truck Unloading Vent Baghouse	0.03	1
40-38	Fryma Silo S-2 Railcar Unloading Baghouse	0.03	3437
40-39	Fryma Silo S-2 Truck Unloading Vent Baghouse	0.03	1
40-40	Silica Silo S-3 Truck Unloading Vent Baghouse	0.03	1

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
40-41	Silica Silo S-3 Railcar Unloading Baghouse	0.03	666
40-42	B Dopp Silica Cyclone Bin Baghouse	0.03	456
40-43	B Dopp Silica Bag Dump Station Baghouse	0.03	643
40-44	Fryma Multi-Bag Dump Station Vent Baghouse	0.03	643
40-47	B Dopp Silica Cyclone Baghouse	0.03	602
40-48	Fryma 1 Silica Cyclone Baghouse	0.03	666
40-49	Fryma 2 Silica Cyclone Baghouse	0.03	666

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
Lime Storage			
48-01	Lime Silo Vent Baghouse	0.03	1296

These limits are equivalent to 68.6 tons per year of PM and PM10 emissions.

- (d) At the fuel limit in (a) above the boilers are limited to 7.6 tons per year of PM and the emissions from the sulfonation unit are 10 tons per year at maximum capacity. Therefore, the limits in (a) through (c), limit the entire source to less than 86.2 tons per twelve (12) consecutive month period of either PM or PM10, therefore the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NO_x. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

326 IAC 2-8 (FESOP)

- (a) The input of natural gas to the 4 boilers shall be limited to 1980 million cubic feet per twelve consecutive month period. For the purposes of determining compliance, every 1000 gallons of No. 2 fuel oil burned shall be equivalent to 0.20 million cubic feet of natural gas based on nitrogen oxides emissions. This usage limit is required to limit the potential to emit of nitrogen oxides to less than 99 tons per year. Therefore the boilers are not subject to the requirements of 326 IAC 2-7.
- (b) The input of No. 2 fuel oil to the 4 boilers shall be limited to 1,540,000 gallons per twelve consecutive month period. This is equivalent to 39.4 tons of sulfur dioxide per year from burning fuel oil. Also the sulfur content must be less than 0.36%. The sulfur input to the sulfonation process shall be limited to 2,190 tons per twelve (12) consecutive month period. The SO₂ emissions from the sulfonation process shall be limited to 1.57 pounds per hour. This limit is based on an emission factor of 3.14×10^{-3} pounds of SO₂ per pound sulfur input to the process. These limits are equivalent to less than 6.88 tons per year. The source uses a caustic scrubber to meet these limits. Therefore, the source is limited to less than 47 tons per year of SO₂ emissions and the requirements of 326 IAC 2-7 do not apply.
- (c) The PM10 emissions from the boilers at the heat input limit in (a) above are limited to 7.6 tons per year. The emissions of PM10 from the sulfonation process at maximum capacity are 10 tons per year. The cleanser manufacturing process, dental creme manufacturing process, and the lime storage facility have the following limits:

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
Cleanser Manufacturing			
38-01	#2 Powder Filling Line Baghouse	0.03	8752

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
38-02	South Making & Finishing Lines Baghouse	0.03	8752
38-03	#3 Line Powder Filling Baghouse	0.03	5179
38-05	Calcite Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-06	Soda Ash Silo Vent Baghouse (Truck Unloading)	0.03	1200
38-07A/B	Calcite Silo Rail Unloading Receiver Baghouse: Stack "A" and "B"	0.03	6730
38-08	Soda Ash Silo Unloading Receiver Baghouse	0.03	1835
38-09	Magnesium Oxide Silo Unloading Receiver Baghouse	0.03	1200
38-10	East Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-11	West Sulfonic Acid & Soda Ash Mixer Vent Baghouse	0.03	75
38-12	Central Vacuum System Baghouse	0.03	645
Dental Creme Manufacturing			
40-03	N&S DOPP House Vent Baghouse	0.06	5966
40-30	N&S DOPP Dicalcium Phosphate Baghouse	0.03	1600
40-31	N&S DOPP Silica Baghouse	0.03	620
40-32	Fryma 2 Silica Baghouse	0.03	620
40-33	Fryma 2 Dical Baghouse	0.03	1600
40-34	Fryma 1 Silica Baghouse	0.03	620
40-35	Fryma 1 Dical Baghouse	0.03	1720
40-36	Dical Silo S-1 Railcar Unloading Baghouse	0.03	3437
40-37	Dical Silo S-1 Truck Unloading Vent Baghouse	0.03	1
40-38	Fryma Silo S-2 Railcar Unloading Baghouse	0.03	3437
40-39	Fryma Silo S-2 Truck Unloading Vent Baghouse	0.03	1
40-40	Silica Silo S-3 Truck Unloading Vent Baghouse	0.03	1

ID No.	Description	Grain Loading (gr/dscf)	Gas Flow Rate (acfm)
40-41	Silica Silo S-3 Railcar Unloading Baghouse	0.03	666
40-42	B Dopp Silica Cyclone Bin Baghouse	0.03	456
40-43	B Dopp Silica Bag Dump Station Baghouse	0.03	643
40-44	Fryma Multi-Bag Dump Station Vent Baghouse	0.03	643
40-47	B Dopp Silica Cyclone Baghouse	0.03	602
40-48	Fryma 1 Silica Cyclone Baghouse	0.03	666
40-49	Fryma 2 Silica Cyclone Baghouse	0.03	666
Lime Storage			
48-01	Lime Silo Vent Baghouse	0.03	1296

These limits are equivalent to 68.6 tons per year of PM10 emissions. Therefore these limits combined limit the total source emissions to less than 86.2 tons per year and thus, the requirements of 326 IAC 2-7 are not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-2 (Particulate Emission Limitations)

326 IAC 6-1-2 (Particulate Emission Limitations) does not apply to this source because no facilities currently at this source are listed in 326 IAC 6-1-17, the source is limiting PM emissions to less than one hundred (100) tons per year, and the source's actual PM emissions are less than ten (10) tons per year.

326 IAC 6-1-17 (Nonattainment Area Limitations)

The equipment listed in 326 IAC 6-1-17 is no longer at the source. Therefore, there are no applicable requirements in this regulation.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The four (4) boilers, identified as 13-01 through 13-04, are subject to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) because they were constructed after September 21, 1983, the applicability date for this rule. Pursuant to CP019-2939-00003 and 326

IAC 6-2-4, the particulate emissions from each of the four boilers shall be limited to less than 0.26 pounds per million British thermal units heat input. This limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{(242)^{0.26}} = 0.26 \text{ lb/MMBtu}$$

Where Pt = pounds of particulate matter emitted per million Btu heat input (lb/MMBtu)
Q = total source maximum operating capacity
(Q = 60.506 + 60.506 + 60.506 + 60.506 = 242 MMBtu/hr)

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the cleanser manufacturing process, dental creme manufacturing process, and lime storage facility shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The individual limits are included in a IDEM, OAQ confidential file because the and process weight rates are considered confidential by the source.

Since PM emissions are equivalent to PM10 emissions, compliance with the FESOP limit will ensure compliance with 326 IAC 6-3-2.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The boilers are subject to 326 IAC 7-1.1. Pursuant to 326 IAC 7-1.1, the boilers shall be limited to 0.5 pounds per million Btu when burning #2 fuel oil. Compliance with the sulfur content limit in the #2 fuel oil of 0.36 percent, which is required to ensure that 326 IAC 2-2 does not apply to the boilers, will satisfy the requirements of 326 IAC 7-1.1-2.

326 IAC 8-3-2 (Volatiles Organic Compounds)

The organic solvent degreasing operations are subject to 326 IAC 8-3-2 because they were installed after 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations installed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (a)(Volatile Organic Compounds)

The organic degreasing operations are not subject to 326 IAC 8-3-5 because they do not meet the applicability described in 326 IAC 8-3-5(b)(1).

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels), the permittee shall keep the following records over the life of each VOC storage vessel:

- (a) The vessel identification number;
- (b) The vessel dimensions;
- (c) The vessel capacity; and
- (e) A description of the emission control equipment for each vessel.

Testing Requirements

All testing requirements from previous approvals were incorporated into this FESOP except the following:

- (a) FESOP 019-5535-00003, issued on December 10, 1996; and expiring on December 10, 2001, SO₂ Stack Testing for the Sulfonation Process.

Reason not incorporated: A stack test was required in F 019-5535-00003, and was performed on July 29, 1997 on the caustic scrubber exhaust for the sulfonation proceeds. The results from the stack test showed an SO₂ emission rate of 0.012 pounds per hour which is significantly below the SO₂ limit of 1.57 pounds per hour. It was determined that because the emissions are significantly less than the limit, additional stack testing is not required for this permit cycle. Ph readings are still required to show that the caustic scrubber is functioning properly, and reporting of the sulfur throughput is also still required. These requirements will provide adequate evidence that the sulfonation process is in compliance.

Additional testing is not required at this source. No single facility emits more than 40% of the total PTE before controls for NO_x, the "major" pollutant. No other testing criteria apply to this source. In the previous permit, stack testing was required to support the emission factor used to calculate SO₂ emissions from the sulfonation process. Based on results from this test, the emissions from the sulfonation process were determined to be very small, and the sulfonation process was changed to an insignificant activity in this permit. As a result, no further testing is necessary.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous

compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

All compliance requirements from previous approvals were incorporated into this FESOP except the following: In the past permit, compliance monitoring was required for the sulfonation process, monitoring the sulfur usage.

Reason not incorporated: Based on stack test results, the sulfonation process was determined to be an insignificant activity, and no compliance monitoring is necessary.

1. The four boilers have applicable compliance monitoring conditions as specified below:
 - (a) Once per shift visible emissions notations of the stack exhaust from the four boilers shall be performed during normal daylight operations when burning fuel oil. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the boilers must operate properly to ensure compliance with 326 IAC 6-2-4, 40 CFR 60.40c (Suppart Dc) and 326 IAC 2-8 (FESOP).

2. The sulfonation process has applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall monitor and record the acid content, pressure drop, and flow rate of the scrubber, at least once per shift when the sulfonation process is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the scrubber is outside the range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of the scrubber is less than the minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the acid content of the scrubber is above the normal maximum pH level of 13, or an acid content established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range, a flow rate that is below the above mentioned minimum, or an acid content above the

above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

- (b) An inspection shall be performed each calendar quarter of the scrubber controlling the sulfonation process when venting to the atmosphere. A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

- (c) In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The monitoring conditions are necessary because the scrubber must operate properly to ensure compliance with 326 IAC 2-8 (FESOP).

- 3. The cleanser manufacturing process, dental products manufacturing process and the lime storage facility have applicable compliance monitoring conditions as specified below:

- (a) Once per shift visible emissions notations of the cleanser manufacturing process, dental products manufacturing process and the lime storage facility shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across baghouse 40-03 controlling the dental creme manufacturing process, at least once per shift when the process is in operation. When for any one reading the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit.
- (c) An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and

every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

(d) In the event that bag failure has been observed:

- (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the must operate properly to ensure compliance with 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this cleanser and dental products manufacturing process shall be subject to the conditions of the attached proposed (FESOP No.: F019-14122-00003).

Appendix A: Emissions Calculations

Page 1 of 11 TSD App A

Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****Company Name: Colgate-Palmolive Company**
Address City IN Zip: 1410 South Clark Blvd**CP: 019-14122****Plt ID: 019-00003****Reviewer: ERG/AR****Date: 10/30/01**

Unlimited PTE for four boilers

Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

242.0

2120.1

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	7.6	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	8.1	8.1	0.6	106.0	5.8	89.0

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-
(SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations

Page 2 of 11 TSD App A

Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name:** Colgate-Palmolive Company**Address City IN Zip:** 1410 South Clark Blvd**CP:** 019-14122**Plt ID:** 019-00003**Reviewer:** ERG/AR**Date:** 10/30/01**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	ne 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.226E-03	1.272E-03	7.950E-02	1.908E+00	3.604E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.300E-04	1.166E-03	1.484E-03	4.028E-04	2.226E-03

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Industrial Boilers (> 100 mmBtu/hr)
#1 and #2 Fuel Oil**

Page 3 of 11 TSD App A

Company Name: Colgate-Palmolive Company
Address, City IN Zip: 1410 South Clark Blvd
CP: 019-14122
Plt ID: 019-00003
Reviewer: ERG/AR
Date: 10/30/01

Unlimited Emissions from boilers using #2 fuel

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.36
242.0	15143.787	

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.0	51.12 (142.0S)	20.0	0.20	5.0
Potential Emission in tons/yr	15.1	387.1	151.4	1.5	37.9

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal per 1000 gallon x 1 gal per

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

**Appendix A: Emissions Calculations
Industrial Boilers (> 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions**

Page 4 of 11 TSD App A

Company Name: Colgate-Palmolive Company
Address, City IN Zip: 1410 South Clark Blvd
CP: 019-14122
Plt ID: 019-00003
Reviewer: ERG/AR
Date: 10/30/01

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	4.24E-03	3.18E-03	3.18E-03	3.18E-03	9.54E-03

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	3.18E-03	6.36E-03	3.18E-03	1.59E-02

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: Colgate-Palmolive Company****Address City IN Zip: 1410 South Clark Blvd****CP: 019-14122****Plt ID: 019-00003****Reviewer: ERG/AR****Date: 10/30/01**

The four boilers must be limited to less than 99 tpy in order to be a FESOP and to make sure PSD was not triggered in a past modifi

Heat Input Capacity
MMBtu/yr

Potential Throughput
MMCF/yr

1980000.0

1980.0

Pollutant

Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
				100.0		
	7.6	7.6	0.6	**see below	5.5	84.0
Potential Emission in tons/yr	7.5	7.5	0.6	99.0	5.4	83.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-02 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Colgate-Palmolive Company****Address City IN Zip: 1410 South Clark Blvd****CP: 019-14122****Plt ID: 019-00003****Reviewer: ERG/AR****Date: 10/30/01****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	ne 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.079E-03	1.188E-03	7.425E-02	1.782E+00	3.366E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.950E-04	1.089E-03	1.386E-03	3.762E-04	2.079E-03

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Industrial Boilers (> 100 mmBtu/hr)
#1 and #2 Fuel Oil

Page 7 of 11 TSD App A

Company Name: Colgate-Palmolive Company
Address, City IN Zip: 1410 South Clark Blvd
CP: 019-14122
Plt ID: 019-00003
Reviewer: ERG/AR
Date: 10/30/01

The boilers must be limited to less than 40 tpy of SO₂ so that a previous modification is not applicable to PSD
This calculation shows the amount of fuel oil that can be used to keep the boilers to less than 40 tpy.

Heat Input Capacity MMBtu/yr	Potential Throughput kgals/year	S = Weight % Sulfur <div style="border: 1px solid black; padding: 2px;">0.36</div>
<div style="border: 1px solid black; padding: 2px;">215600</div>	1540	

Emission Factor in lb/kgal	Pollutant				
	PM*	SO ₂	NO _x	VOC	CO
	2.0	51.12 (142.0S)	20.0	0.20	5.0
Potential Emission in tons/yr	1.5	39.4	15.4	0.2	3.9

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 1kgal per 1000 gallon x 1 gal per 0.140 MM

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emissions Calculations
Industrial Boilers (> 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions

Company Name: Colgate-Palmolive Company
Address, City IN Zip: 1410 South Clark Blvd
CP: 019-14122
Plt ID: 019-00003
Reviewer: ERG/AR
Date: 10/30/01

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	3.78E+00	2.83E+00	2.83E+00	2.83E+00	8.50E+00

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	2.83E+00	5.67E+00	2.83E+00	1.42E+01

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: Colgate-Palmolive Company****Address City IN Zip: 1410 South Clark Blvd****CP: 019-14122****Plt ID: 019-00003****Reviewer: ERG/AR****Date: 10/30/01**

If the source burned all of the fuel oil allowed, this calculation shows the emissions from burning the maximum amount of Natural gas

Heat Input Capacity
MMBtu/yr

Potential Throughput
MMCF/yr

1980000.0

1980.0

Pollutant

Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
				100.0		
	7.6	7.6	0.6	**see below	5.5	84.0
Potential Emission in tons/yr	7.5	7.5	0.6	99.0	5.4	83.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-02 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations

Page 10 of 11 TSD App A

Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Colgate-Palmolive Company****Address City IN Zip: 1410 South Clark Blvd****CP: 019-14122****Plt ID: 019-00003****Reviewer: ERG/AR****Date: 10/30/01****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	ne 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.079E-03	1.188E-03	7.425E-02	1.782E+00	3.366E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.950E-04	1.089E-03	1.386E-03	3.762E-04	2.079E-03

Methodology is the same as page 5.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
PM Emissions
Company Name: Colgate-Palmolive Company
Address City IN Zip: 1410 South Clark Blvd.
CP: 019-14122
Plt ID: 019-00003
Reviewer: ERG/AR
Date: 10/30/01

Bldg. No.	I.D. No.	Description	Gas Flow Rate (acfm)	Max Outlet Grain Loading (gr/dscf)	Allowable Grain Loading (2-8) (gr/dscf)	Design/ Minimum Removal Efficiency (%)	Integral Baghouse (Y or N)	Uncontrolled Potential to Emit (tpy)*	Controlled Potential to Emit (tpy)	Allowable Potential to Emit (tpy)
38	38-01	#2 Powder Filling Line Baghouse	8752	0.02	0.03	99.900%	Y	6.57	6.57	9.86
38	38-02	South Making & Finishing Lines Baghouse	8752	0.02	0.03	99.900%	Y	6.57	6.57	9.86
38	38-03	#3 Line Powder Filling Baghouse	5179	0.02	0.03	99.900%	Y	3.89	3.89	5.83
38	38-05	Calcite Silo Vent Baghouse (Truck Unloading)	1200	0.02	0.03	99.900%	Y	0.90	0.90	1.35
38	38-06	Soda Ash Silo Vent Baghouse (Truck Unloading)	1200	0.02	0.03	99.900%	Y	0.90	0.90	1.35
38	38-07A/B	Calcite Silo Rail Unloading Receiver Baghouse: Stack 'A' and 'B'	6730	0.03	0.03	99.900%	Y	7.58	7.58	7.58
38	38-08	Soda Ash Silo Unloading Receiver Baghouse	1835	0.03	0.03	99.900%	Y	2.07	2.07	2.07
38	38-09	Magnesium Oxide Silo Unloading Receiver Baghouse	1200	0.03	0.03	99.900%	Y	1.35	1.35	1.35
38	38-10	East Sulfonic Acid & Soda Ash Mixer Vent Baghouse	75	0.03	0.03	99.900%	Y	0.08	0.08	0.08
38	38-11	West Sulfonic Acid & Soda Ash Mixer Vent Baghouse	75	0.03	0.03	99.900%	Y	0.08	0.08	0.08
38	38-12	Central Vacuum System Baghouse	645	0.03	0.03	99.900%	Y	0.73	0.73	0.73
Subtotal -- Cleanser Manufacturing								30.73	30.73	40.14
40	40-03	N+S DOPP House Vent Baghouse	5966	0.02	0.03	99.500%	N	895.92	4.48	6.72
40	40-30	N & S DOPP Dicalcium Phosphate Baghouse	1600	0.02	0.03	99.998%	Y	1.20	1.20	1.80
40	40-31	N & S Dopp Silica Baghouse	620	0.03	0.03	99.998%	Y	0.70	0.70	0.70
40	40-32	Fryma 2 Silica Baghouse	620	0.03	0.03	99.998%	Y	0.70	0.70	0.70
40	40-33	Fryma 2 Dical Baghouse	1600	0.02	0.03	99.998%	Y	1.20	1.20	1.80
40	40-34	Fryma 1 Silica Baghouse	620	0.03	0.03	99.998%	Y	0.70	0.70	0.70
40	40-35	Fryma 1 Dical Baghouse	1720	0.02	0.03	99.998%	Y	1.29	1.29	1.94
40	40-36	Dical Silo S-1 Railcar Unloading Baghouse	3437	0.02	0.03	99.998%	Y	2.58	2.58	3.87
40	40-37	Dical Silo S-1 Truck Unloading Vent Baghouse	1	0.02	0.03	99.998%	Y	0.00	0.00	0.00
40	40-38	Fryma Silo S-2 Railcar Unloading Baghouse	3437	0.02	0.03	99.998%	Y	2.58	2.58	3.87
40	40-39	Fryma Silo S-2 Truck Unloading Vent Baghouse	1	0.02	0.03	99.998%	Y	0.00	0.00	0.00
40	40-40	Silica Silo S-3 Truck Unloading Vent Baghouse	1	0.02	0.03	99.998%	Y	0.00	0.00	0.00
40	40-41	Silica Silo S-3 Railcar Unloading Baghouse	666	0.03	0.03	99.998%	Y	0.75	0.75	0.75
40	40-42	B Dopp Silica Cyclone Bin Baghouse	456	0.02	0.03	99.990%	Y	0.34	0.34	0.51
40	40-43	B Dopp Silica Bag Dump Station Baghouse	643	0.03	0.03	99.990%	Y	0.72	0.72	0.72
40	40-44	Fryma Multi-Bag Dump Station Vent Baghouse	643	0.03	0.03	99.990%	Y	0.72	0.72	0.72
40	40-47	B Dopp Silica Cyclone Baghouse	602	0.02	0.03	99.990%	Y	0.45	0.45	0.68
40	40-48	Fryma 1 Silica Cyclone Baghouse	666	0.02	0.03	99.990%	Y	0.50	0.50	0.75
40	40-49	Fryma 2 Silica Cyclone Baghouse	666	0.02	0.03	99.990%	Y	0.50	0.50	0.75
Subtotal -- Dental Crème Manufacturing								910.87	19.43	26.99
48	48-01	Lime Silo Vent Baghouse	1296	0.02	0.03	99.900%	Y	0.97	0.97	1.46
TOTAL								942.57	51.13	68.60

* For units with integral baghouses, the uncontrolled potential is equivalent to the controlled potential since the source cannot operate without the baghouses.